

### **REMARKS / ARGUMENTS**

Claims 1 - 49 and 69 remain in this application. Claims 50 - 68 are withdrawn from consideration.

Claims 8, 11, 28, 30, 31, 32, 36, 38, 43, 49, and 69 are amended. Further discussion is provided below. The amendments are supported by the specification as filed.

Claims 28, 31, 32, 36, 38, and 69 are amended to add that the "aqueous acid comprises at least one compound selected from the group consisting of sulfuric acid, phosphoric acid, and mixtures thereof." Support is in the specification as filed (see, e.g., paragraph [00032]).

Claims 38 and 69 are amended to add that separating the precipitated salt from the hindered phenolic alkyl ester compound is "by filtration". Support is in the specification as filed (see, e.g., paragraph [00033]).

### **Claim Rejections - 35 USC 112**

Applicants acknowledge the rejection of claims 1 - 38 and 43 - 49 under 35 USC 112, second paragraph.

**Claims 1, 23, 28, 31 - 32, and 35** are rejected because of use of the terms "a first catalyst" and "a second catalyst". Applicants submit that use of the adjectives "first" and "second" in each case is appropriate for providing proper antecedent basis. Applicants refer the Examiner to the following passage from 2173.05(3) of the MPEP ("Lack of Antecedent Basis"):

A claim is indefinite when it contains words or phrases whose meaning is unclear. The lack of clarity could arise where a claim refers to "said lever" or "the lever," where the claim contains no earlier recitation or limitation of a lever and where it would be unclear as to what element the limitation was

making reference. Similarly, if two different levers are recited earlier in the claim, the recitation of "said lever" in the same or subsequent claim would be unclear where it is uncertain which of the two levers was intended. A claim which refers to "said aluminum lever," but recites only "a lever" earlier in the claim, is indefinite because it is uncertain as to the lever to which reference is made.

In the present claims, e.g., claim 1, the term "first catalyst" is used to refer to the catalyst that methyl acrylate and an alkylphenol compound are reacted in the presence of to form a methyl ester intermediate compound; and the term "second catalyst" is used to refer to the catalyst that an alcohol having at least 2 carbon atoms and the methyl ester intermediate compound are reacted in the presence of to form the hindered phenolic alkyl ester compound. The fact that the first catalyst is used in a reaction different from the reaction in which the second catalyst is used is sufficient to distinguish the two. Subsequent claims require the antecedent basis provided by use of the terms "first catalyst" and "second catalyst". For example, claim 2 specifies that the first and second catalysts have the same chemical composition and claim 3 specifies that the first and second catalysts have different chemical compositions.

Given the foregoing explanation, Applicants submit that use of the terms "first catalyst" and "second catalyst" are appropriate and clear. Applicants therefore request withdrawal of the related 35 USC 112 rejection.

**Claim 11** is rejected because of use of the phrase "at least about". Applicants respectfully disagree that the expression is vague and indefinite. The MPEP section cited by the Examiner refers to use of the term about where there is close prior art which makes use of the term vague, which is not true in the present situation. Nonetheless, to expedite prosecution, Applicants have amended claim 11 to remove the word "about".

Given the amendment to claim 11, Applicants request withdrawal of the related 35 USC 112 rejection.

**Claims 8 and 43** are rejected because of use of the term "substantially". In order to expedite prosecution, Applicants have amended claims 8 and 43 to remove the word "substantially" and have similarly amended claim 32.

Given the amendment to claims 8 and 43, Applicants request withdrawal of the related 35 USC 112 rejection.

**Claims 21, 33 - 34, and 49** are rejected because of use of the term "comprises". Applicants refer the Examiner to the following passage from 2111.03 of the MPEP ("Transitional Phrases"):

The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., *Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004) ("like the term 'comprising,' the terms 'containing' and 'mixture' are open-ended."); *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003) ("The transition 'comprising' in a method claim indicates that the claim is open-ended and allows for additional steps."); *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997) ("Comprising" is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.); *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); *Ex parte Davis*, 80 USPQ 448, 450 (Bd. App. 1948) ("comprising" leaves "the claim open for the inclusion of unspecified ingredients even in major amounts"). >In *Gillette Co. v. Energizer Holdings Inc.*, 405 F.3d 1367, 1371-73, 74 USPQ2d 1586, 1589-91 (Fed. Cir. 2005), the court held that a claim to "a safety razor blade unit comprising a guard, a cap, and a group of first, second, and third blades" encompasses razors with more than three blades because the transitional phrase "comprising" in the preamble and the phrase "group of" are presumptively open-ended.

Applicants submit that Applicants' use of the term "comprising" in each of claims 21, 33 - 34, and 49 is appropriate and clear as Applicants intend for the phrases in which the term "comprising" is used to be open ended, as is expressly allowed (as indicated by the above passage from the MPEP).

Given the foregoing explanation, Applicants request withdrawal of the related 35 USC 112 rejection.

### **Claim Rejections - 35 USC 102**

Applicants acknowledge the rejection of claims 38 and 69 under 35 USC 102(b), as being anticipated by Evain et al (US 5,264,612). However, each of claims 38 and 69, require "neutralizing the catalyst with an aqueous acid to form a precipitated salt". Evain et al does not teach such a step. In fact, Evain et al makes no mention of forming a precipitated salt. Further, each of claims 38 and 69 as herein amended require "separating the precipitated salt from the hindered phenolic alkyl ester compound by filtration". This further distinguishes claims 38 and 69 from Evain et al. See Example 1 of Evain et al. at column 5, lines 29 - 30, where Evain et al notes that "The reaction mixture is then filtered and the filtrate distilled". Thus the route described by Evain et al produces soluble salts that are removed by distillation and not by filtration.

Given the foregoing, e.g., that Evain et al does not teach two features of Applicants' claims 38 and 69, i.e., Evain et al does not teach forming a precipitated salt and, therefore, also do not teach separating the precipitated salt by filtration, Applicants request withdrawal of the related 35 USC 102 rejection.

### **Claim Rejections - 35 USC 103**

Applicants acknowledge the rejection of claims 1 - 49 and 69 under 35 USC 103(a), as being unpatentable over Haeberli et al (US 4,228,297) in view of Grant et al (Chemical Dictionary, 1990, p. 11 - 12). However, Applicants disagree with the assertion that acetic acid as used by Haeberli et al has the same function as the phosphoric acid (or any of the aqueous acids, e.g., sulfuric acid, phosphoric acid, and mixtures thereof) required in Applicants' claimed processes. Applicants' claims require that neutralizing catalysts or catalyst residue with an aqueous phosphoric acid, or with an aqueous acid (wherein the aqueous acid comprises at least one compound selected from the group consisting of sulfuric acid, phosphoric acid, and mixtures thereof), form a precipitated salt. There is no indication in Haeberli et al that Haeberli et al's use of acetic acid results in neutralizing catalysts or catalyst residue to form a precipitated salt as is required by Applicants' claims. Further, it is

clear from Haeberli et al's examples that no precipitated salt is formed. See Haeberli et al's Example 1 at column 10, lines 49 - 59. Acidifying the reaction mass with glacial acetic acid does not form a precipitated salt. Instead a solution results, which must be clarified so the product can crystallize and be isolated on a Buchner funnel. See also Haeberli et al's Example 4 at column 11, line 64 - column 12, line 16. Again, acidifying the reaction mixture with glacial acetic acid does not form a precipitated salt. Instead, a melt results, which is dissolved in ethyl alcohol to form a solution, which must be clarified so the reaction product can crystallize and then be isolated on a Buchner funnel.

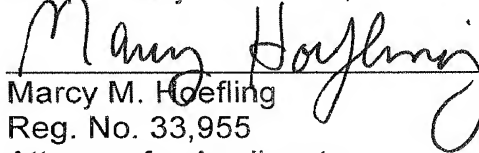
It is familiar to those skilled in the art that whether or not salts precipitate is very system dependent. Thus a chemist would not look to the disclosure of Haeberli et al, which does not teach or suggest precipitation of salts, for a system that precipitates salts. Further, there is no teaching or suggestion in Haeberli et al that use of phosphoric acid, or any other acid, in place of acetic acid would give a system that precipitates salts. Applicants have discovered the currently claimed invention, which is not taught or suggested by Haeberli et al, even in view of Grant et al.

Given the foregoing, Applicants request withdrawal of the 35 USC 103 rejection.

Applicants respectfully request withdrawal of all claim rejections and allowance of the pending claims as hereby amended. Please contact Applicants' attorney, Marcy Hoefling, at 225-388-7210 if additional information is needed.

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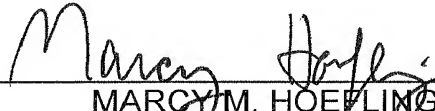
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**CERTIFICATE OF SUBMISSION**

I hereby certify that, in the course of ordinary business, this paper (along with any referred to as being attached or otherwise included with this submission) is being submitted on the date indicated below to the United States Patent and Trademark Office via EFS-Web.

  
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Date: 14 March 2007